CLAIMS:

- 1. A therapy combination which comprises a locating unit (1) for locating a therapy zone within an object and also comprises a therapy unit (2) which is provided with a therapy head (203) for focusing energy in a focus (F₂), the therapy unit (2) and the locating unit (1) being movable relative to one another, there also being provided a measuring device which comprises two sub-systems and serves to determine the relative position of the two sub-systems, one sub-system (107, 108) being attached to the locating unit (1) while the other sub-system (207, 208) is attached to the therapy unit (2) in a defined position relative to the therapy head (203).
- 2. A therapy combination as claimed in claim 1, which comprises a display unit (5) for the display of images formed by means of the locating unit (1), and also comprises means (100, 4) for determining the position of the focus in an image formed by the locating unit from the determined relative position of the sub-systems, and also means (4) for generating a mark (F₂) characterizing the position in the image.

15

20

5

- 3. A therapy combination as claimed in claim 1, in which one sub-system comprises an ultrasound transmission unit with at least three ultrasound transmitters (208) which are situated at a distance from one another whereas the other sub-system includes an ultrasound receiving unit with at least three ultrasound receivers (108) which are situated at a distance from one another, there being provided means (111) for measuring the times of flight of the ultrasound signals from the ultrasound transmitters to the ultrasound receivers and means (4, 111) for determining the position of the ultrasound receiving unit relative to the ultrasound transmission unit.
- 4. A therapy combination as claimed in claim 1, in which the therapy unit (2) and the locating unit (1) are displaceable on a respective carriage (01, 105).
 - 5. A therapy combination as claimed in claim 1, which comprises a locating system provided with an X-ray source (102) and an X-ray image converter (101).

5

10

15

- A therapy combination as claimed in claim 5, in which the X-ray source (102) and the X-ray image converter (101) are attached to the ends of a C-arm (103), the associated sub-system (107, 108) of the measuring device being attached to the C-arm or to one of the components attached thereto, preferably to the X-ray image converter (101).
- A therapy combination as claimed in claim 6, in which the sub-system (108) associated with the locating unit (1) is attached to the X-ray image converter or to the X-ray source, and a third sub-system (110) which co-operates therewith is attached to the X-ray source, or to the X-ray image converter, in order to monitor the relative position of the X-ray image converter and the X-ray source.
- 8. The use of a measuring device (4, 110) with two sub-systems (108, 208) which are to be attached to the units of a therapy combination (1, 2) as claimed in claim 1 in order to determine the relative position of the two sub-systems or of the units.
- 9. A therapy system which comprises a therapy combination as claimed in claim 1 and a patient table (3) whose table top can be displaced in three mutually perpendicular directions.